

CALIFORNIA NONPOINT SOURCE (NPS) MANAGEMENT PROGRAM

TRACKING & MONITORING OBJECTIVES

February 2005

This working paper describes tracking and monitoring objectives for the California NPS Program. These objectives identify the Program's data and information needs, and will be used to design and implement activities that will provide information to better guide implementation of nonpoint source pollution control measures. These data and information needs will be addressed through the Water Board's monitoring program (SWAMP), and related monitoring and implementation tracking activities. The definitions associated with these objectives should be considered to be 'functional' definitions only for the purpose of this effort.

Objective #1: What is the quality of water in California?

- a. Indicate the extent and location of water quality **impairments**.
- b. Indicate the extent and location of water quality **threatened water bodies**.
- c. Indicate the extent and location of **high quality waters**.

Objective #2: What is the extent of impairments associated with nonpoint sources?

- a. Indicate the extent and location of impairments associated with **nonpoint** versus **point source** pollution.
- b. Indicate the extent and location of waters that are threatened by existing or potential **nonpoint** sources.

Objective #3: What are the nonpoint sources that are impairing or threatening water quality?

- a. Indicate the **pollutants** that are associated with the source of the impairment or threat.
- b. Associate nonpoint source impaired or threaten waters with various **land use activities**.
- c. Indicate extent of impairment or threat associated with each **land use activity**.

Objective #4: Is water quality getting better or worse?

- a. Indicate the trend of impairments over time.
- b. Indicate the trend of point versus nonpoint source impairments over time.
- c. Indicate the trend of NPS impairments for each land use category and pollutant.

Objective #5: Is the California NPS Program investing resources consistent with water quality problems?

- a. Indicate the location and extent of **resources** expended.
- b. Associate location and extent of **resources** expended with NPS threatened and impaired water bodies.
- c. Indicate the location and extent of **management measures/practices** being implemented.
- d. Indicate the extent and location of implementation compared to NPS threaten and impaired water bodies.

Objective #6: Are NPS investments effective in protecting and restoring water quality?

- a. Indicate the improvement in water quality where investments have been made.
- d. Indicate the improvement in water quality where management measures have been implemented.
- e. Indicate the technical effectiveness of specific management practices.
- f. Indicate cost-effectiveness associated with implementation of management practices.

Definitions

High Quality Water: High quality water for the purpose of NPS Monitoring is a water body that supports all of its designated beneficial uses. It may also be a threatened water body.

Impairment: A water body is considered impaired when it is unable to support designated beneficial uses. The water body may be on the final SWRCB 303(d) list for one or more stressors, but will have been determined to be deficient in support of a designated beneficial use. It may also be on the 'Pollution List' which means that it is not necessarily impacted by a pollutant, but rather by other factors such as invasive species, reduced stream flow, or water diversion.

Investments: Refers to the activities that are supported with the resources (as identified above) that are available to address NPS water quality concerns.

Land Use Activities: For the purpose of NPS Monitoring, the Land Use Activities refer to Agriculture, Forestry, Urban (NPDES and non-NPDES), Marinas and Hydromodification. These categories are a subset of the 6 management categories identified in the California Nonpoint Source Management Plan. Wetlands is an additional management category that should also be considered for the monitoring program. *(Please note that the NPS Program is working to develop a more detailed template regarding these land use categories.)*

Management Measures (MM)/Practices (MPs): MMs are groupings of Management Practices (MPs) which when implemented, address water quality problems that occur from specific types of land-use activities. There are 62 MMs in the California NPS Program Plan. The goal of the program is to implement these management measures by 2013

Nonpoint Sources: For the purpose of the NPS Monitoring, the Clean Water Act definition of Nonpoint Sources will be utilized. The CWA does not provide a detailed definition of nonpoint sources. Rather, they are defined by exclusion -- anything not considered a "point source" according to the Act and EPA regulations.

Point Source: Discrete conveyances, such as pipes or man made ditches that discharge pollutants into waters of the United States. This includes not only discharges from municipal sewage plants and industrial facilities, but also collected storm drainage from larger urban areas, certain animal feedlots and fish farms, some types of ships, tank trucks, offshore oil platforms, and collected runoff from many construction sites.

Pollutants: The term pollutant is defined in Section 502(6) of the Clean Water Act as "dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal and agricultural waste discharged into water."

Resources: The resources directly available by the CA NPS Program includes (1) "project funds" that support a wide range of project activities conducted by "third parties" (e.g., Resource Conservation Districts, watershed groups, municipalities, and others) and (2) "staff funds" that support SWRCB and RWQCB staff activities (e.g., outreach, monitoring, inspections, enforcement, etc.). The source of "project funds" includes state bonds (e.g., Propositions 13, 40 & 50, CWA Section 319, the State Revolving Fund) and the source of "staff funds" includes State General Funds and CWA Section 319. Additional resources indirectly available by the CA NPS Program include (1) other state agencies "project funds" and "staff funds" and (2) other federal agencies "project funds" (e.g., EQIP through NRCS) and "staff funds" and (3) other public and private expenditures.

Threatened water body: For the purpose of the NPS Monitoring, a water body will be considered threatened if there are stressors in the watershed of a quantity or concentration such that continued land use activities would possibly create a loss to one or more of its designated beneficial uses. The water body would most likely be on the SWRCB 'Planning List', which means that some data supports the idea that it may become 'impaired'.